

WOOLF et al. — Appln. No. 09/778,956

IN THE SPECIFICATION:

Page 11, please delete the whole paragraph extending from line 5 to line 20 and replace it with the following new paragraph:

Accordingly, each target may be prepared from a set of cell dishes by isolation of RNA over a course of time. The treatment of those cells may be emulated by adding, for example, serum thereto. Serum, for example, may be added to the cells in order to ensure a proper growth environment. At predetermined intervals, a small amount of the fluid is removed, and the cells are put in a quiescent state to stop the reaction time. Accordingly, a large set of targets, having a predetermined amount of liquid (e.g., .5 ml each) is produced. The GeneChip™ fluidics station will then automatically hybridize each target, i.e., it will extract all the RNA and label the RNA by adding a chemical tag to each molecule, and control the delivery of the resulting liquid to the probe arrays to facilitate obtaining sequencing information regarding the mRNAs. This is done by the probe arrays exposing the target to light at a predetermined location and measuring the photons collected at various locations within the arrays. The amount of mRNA is then ascertained based upon the signal strength of the reading given by the probe at the appropriate location corresponding to that sequence or sequence segment. A net change in signal may indicate activation or repression of gene transcription, or possibly post-transcriptional stabilization of the mRNA due a given set of treatment conditions.